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NATO and Warsaw Pact Conventional Forces in the Atlantic-to-Urals Zone, 1987

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Interagency Intelligence Memorandum

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**NATO AND WARSAW PACT CONVENTIONAL
FORCES IN THE ATLANTIC-TO-URALS ZONE,
1987**

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This Memorandum was approved for publication
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National Intelligence Council.

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Figure 1
NATO and Warsaw Pact Forces Within the Atlantic-to-Urals Zone



Indigenous Forces		Stationed Forces	
Belgium	Netherlands	Belgium	
Denmark	Norway	Canada	
France	Portugal	France	
Greece	Spain	Italy	
Iceland	Turkey	Netherlands	
Italy	United Kingdom	United Kingdom	
Luxembourg	West Germany	United States	
		West Germany	

Indigenous Forces		Stationed Forces	
Bulgaria	Hungary	Group of Soviet Forces, Germany	
Czechoslovakia	Poland	Central Group of Forces (Czechoslovakia)	
East Germany	Romania	Northern Group of Forces (Poland)	
Soviet Military Districts		Southern Group of Forces (Hungary)	
Baltic	North Caucasus		
Belorussian	Odessa		
Carpathian	Transcaucasus		
Kiev	Ural		
Leningrad	Volga		
Moscow			

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INTRODUCTION

This Interagency Intelligence Memorandum is designed as a reference aid to provide data on NATO and Warsaw Pact conventional forces in the Atlantic-to-Urals zone. The information contained herein was requested by the Chairman of the Interdepartmental Group for Conventional Arms Control to support the formulation of new US and NATO conventional arms control positions. The document presents an initial compilation of our estimates of both NATO and Warsaw Pact conventional forces in the region; it does not, however, provide a net assessment of these forces.

Although the Atlantic-to-Urals zone has not been officially defined, the Intelligence Community has established a working definition for the purpose of compiling data in the Memorandum. Data on NATO forces cover indigenous conventional forces in the following countries: Belgium, the Netherlands, Luxembourg, the Federal Republic of Germany (FRG), France, the United Kingdom, Denmark, Iceland, Norway, Italy, Spain, Portugal, Greece, and Turkey. It also covers stationed NATO forces in these countries, including those from Canada and the United States. Turkish national data are presented separately for forces in European Turkey (Thrace) and Asian Turkey (Anatolia); this was done to provide flexibility in accounting for these forces pending final definition of the mandate area. Data on Warsaw Pact forces embrace indigenous conventional forces in the German Democratic Republic (GDR), Poland, Czechoslovakia, Hungary, Bulgaria, and Romania, and Soviet forces in the 11 military districts west of the Ural Mountains. It also includes Soviet forces stationed in Eastern Europe (see map on page iv). For comparison, summary tables are also provided for the critical subset of forces in Central Europe. These tables include data for all conventional forces in the following countries: Belgium, the Netherlands, Luxembourg, the Federal Republic of Germany, the German Democratic Republic, Poland, Czechoslovakia, and Hungary.

The data have been derived from several sources. US data have been provided by the US Army and the US Air Force through the Organization of the Joint Chiefs of Staff. The Central Intelligence Agency and the Defense Intelligence Agency have prepared jointly the estimates for non-US NATO and Warsaw Pact forces. All data are judged to be current for all forces for the first half of 1987.

This Memorandum addresses the ground, air, and air defense forces of the two alliances. Data on these forces are organized into separate categories covering force structure, equipment, and personnel.

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The data in each category have been independently derived and are organized into two sections. The first section presents two sets of "Summary Tables" of NATO and Warsaw Pact forces. The second section, "Backup Tables," provides more detailed information on these forces.

In accordance with the mandate of the NATO High-Level Task Force, this document focuses on Warsaw Pact capabilities most relevant to a surprise attack and/or large-scale offensive action. This requirement is uniformly applied to NATO forces as well as Pact forces. As a result, the data base excludes the following: naval forces; border guards, internal security, national-level construction, transportation, and civil defense units; police; short-leave military personnel (NATO); reservists; and civilians working in military establishments.

NATO and the Warsaw Pact forces are not directly comparable; many differences in organization and equipment exist between the two alliances. In general, the Warsaw Pact is far more standardized in its structure and equipment than NATO. For example, the size of NATO divisions varies widely from one country to another, and several NATO countries have no divisions at all in their force structure. Other disparities occur throughout NATO ground and air forces, both in terms of unit equipment—and the lack of commonality therein—and manpower levels. NATO also places greater emphasis on multirole systems, particularly combat aircraft, thereby making direct comparisons with Warsaw Pact equipment relatively imprecise. To clarify these differences, we have included with the backup tables specific definitions and counting rules for the force structure, equipment, and manpower of both sides.

Judgments regarding the capabilities and readiness of NATO and Warsaw Pact forces, such as quality of equipment and training, time required to prepare forces for war, the ability to reinforce them with generated reserves, and the capability to move them to possible lines of engagement along the front are not the subject of this document; inferences with regard to such issues should not be drawn from the data presented here. Such issues are addressed in [redacted] National Intelligence Estimates, other intelligence and planning analyses and NATO force capability studies.

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This Memorandum was published under the auspices of the National Intelligence Officer for General Purpose Forces. It was prepared jointly by the Office of Soviet Analysis and the Office of European Analysis of the Central Intelligence Agency and by the Soviet/Warsaw Pact Division and the West Europe/Latin America Division of the Defense Intelligence Agency and was coordinated with the intelligence components of the Departments of State and Defense.

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STATEMENT OF ESTIMATIVE CONFIDENCE

The data contained in this Memorandum have been obtained from a variety of sources. Our confidence in these numbers varies depending on type of sources of these data, the type and size of the force components considered, as well as collection capabilities and analytic techniques. [REDACTED]

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There are important differences between the analytic process that sustains our force estimates in this Memorandum and an intelligence monitoring process that would support verification of a reduction and limitation agreement. Our current estimates are derived from evidence accumulated over a period of years on forces that have been relatively stable. Changes—some of which have been substantial over time—generally have evolved slowly over several years. Our confidence in being able to promptly monitor forces to ensure treaty compliance could differ significantly from that associated with force estimates contained in this Memorandum, depending on the terms of an agreement and available collection resources. [REDACTED]

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US Figures and Non-US NATO Estimates

The numbers on US force structure, equipment, and manpower in the Atlantic-to-Urals zone have been provided by appropriate US services through the Organization of the Joint Chiefs of Staff, Plans and Policy Directorate (J-5). These numbers represent official US data. The figures for non-US NATO and Warsaw Pact forces, however, are *estimates* derived from many different sources of information. [REDACTED]

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Overall, we have moderate to high confidence in the non-US NATO estimates contained in this Memorandum. Estimates on non-US NATO forces have been derived from both official and unofficial sources and may not coincide with actual numbers. A large part of the data used to prepare the estimates on non-US NATO force structure, equipment, and manpower was provided by our Allies on a multilateral basis—usually in response to NATO's Defense Planning Questionnaires (DPQs).¹ Because some of the non-US NATO countries do not respond fully to DPQs (Greece and Turkey) or are not integrated into NATO's military command structure (France and Spain), there is greater uncertainty associated with estimates of forces in these countries. (S NF)

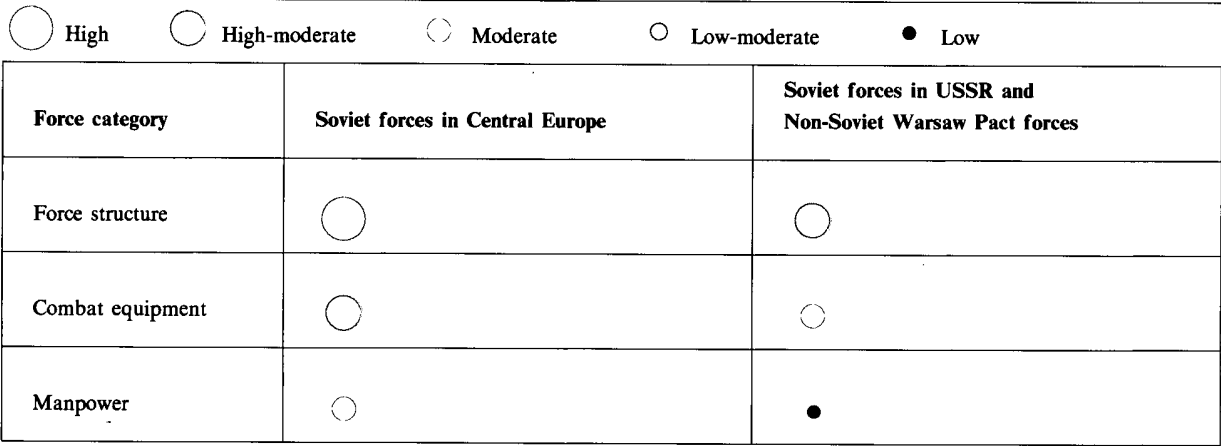
¹ NATO DPQ documents are developed at varying dates early in a calendar year and contain data projected to the end of that year. [REDACTED]

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Figure 2
Confidence Rankings of Warsaw Pact Estimates



Confidence in our estimates of Warsaw Pact forces varies according to force category. These estimates could vary from the true numbers by as much as the percentages shown below:

- High Varies by as much as 5 percent.
- High-moderate Varies by as much as 10 percent.
- Moderate Varies by as much as 15 percent.
- Low-moderate Varies by as much as 20 percent.
- Low Varies by as much as 25 percent.

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Warsaw Pact Estimates

The Intelligence Community’s confidence in these estimates of Warsaw Pact forces varies depending on whether the focus is structure, equipment, or manpower (see figure 2). The Community’s confidence in these estimates also varies by region—generally much higher for Soviet forces in Central Europe than for non-Soviet Warsaw Pact (NSWP) forces (particularly those in the Balkans) or for Soviet forces based inside the USSR. This is due in large measure to fundamental differences in our capability to identify different force components (that is, structure, equipment, and manpower), and the different collection priorities assigned to monitoring these forces and regions.

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Force Structure

We associate the highest confidence with our estimates of the number, composition, and location of Soviet ground and air forces' large combat formations (that is ground maneuver divisions, independent brigades, and tactical air regiments) stationed in Central Europe. This part of the estimate [] traditionally has received most of the collection, exploitation, and analytical effort and normally is the most clearly defined force category. The structure and organization of combat units—especially at the squadron, battalion, and regimental levels—are well known, and changes to their equipment holdings and organization (which are key to identifying them) are relatively easy to recognize. Force structure estimates of smaller combat support and rear services units in the region are subject to greater uncertainty because they differ widely in terms of type and function and much less is known about their structure and organization. Our estimates for these smaller units are derived partly from scarce unit specific information and partly from assumptions based on our general understanding of Soviet force structure. []

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Equipment

The Community's Warsaw Pact equipment estimates are derived by summing the assessed equipment holdings of each identified unit in the Atlantic-to-Urals zone, using estimated standard tables of organization and equipment (TO&Es) as a basis. In general, the equipment assessments are derived by first estimating the authorized holdings for a unit of a particular type and then applying this standard to all such like units within a force—with modifications where warranted. []

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For major combat equipment (such as tanks, artillery, and aircraft) a concerted effort is made to ascertain assigned equipment holdings.

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However [] only infrequently provide direct evidence of total counts of equipment in the force. In fact, when provided, the evidence usually pertains only to small-size units—such as companies, battalions, or squadrons. Thus, our estimates of Pact equipment inventories must be constructed from a mix of direct and indirect sources of information. Confidence associated with these estimates is subject to the same regional and national variations noted above. []

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There are further uncertainties attached to the Community's estimates of some of the smaller, less "visible," weapon systems. Because it generally is harder to distinguish small as opposed to large pieces of equipment, confidence in our estimates of some models of mortars or manpack antitank guided missiles, for example, is lower than confidence in our estimates of tanks or combat aircraft. Our estimates for these smaller weapons systems are almost exclusively derived from our knowledge of unit wartime tables of equipment. Moreover, we have difficulty in differentiating between certain models of weapons whose external characteristics differ only marginally. For example, the observable feature distinguishing the T-64A and T-64B tank models consists of a small box housing a special radio antenna on the side of the T-64B's turret. (S NF)

A great degree of uncertainty is associated with estimates of Pact weapons held *outside units*. We believe that the Warsaw Pact currently holds a large number of major weapons in training units, schools, equipment storage depots, and repair facilities. These groupings of weapons are not configured according to any established Warsaw Pact tables of equipment. []

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Manpower

Confidence in Warsaw Pact manpower estimates varies widely for units in the zone, but overall is substantially lower than estimates of Pact force structure or unit equipment inventories. We have high-moderate confidence in peacetime manpower estimates of Soviet maneuver divisions and tactical air regiments stationed in Central Europe. This level of confidence drops dramatically, however, when considering the estimates for smaller combat support and rear services units, as well as for most NSWP units and Soviet units inside the USSR. []

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This lower estimative confidence in manpower totals is due chiefly to the severe lack of direct evidence on unit peacetime troop strengths compared with the evidence available on Pact structure and equipment. Without substantial direct evidence we must resort to using inferential judgments when making most unit manpower estimates. [REDACTED]

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There are several other factors contributing to the uncertainty associated with these manpower estimates. The force is very large and made up of a multitude of different type and size units. Although many of these units may have identical organizations and *wartime manpower requirements* (such as tank regiments), some of their *peacetime manpower strengths* may vary considerably from region to region. Also, the recurrence of organizational change in these forces—often taking several years to filter through the entire force—makes it difficult to determine the unit's manpower requirement. [REDACTED]

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Summary Tables

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Table 1
NATO
Atlantic to Urals
Force Structure Summary

	Ground Force Divisions (Active/Reserve)	Ground Force Independent Brigades (Active/Reserve)	Ground Force Independent Regiments (Active/Reserve)	Air Force Wing/Squadron	Air Defense ^a Wing/Squadron
Total	74/6	94/31	50/28	13/235	NA
United States	4/5 ^b	3/0 ^c	2/1 ^d	0/32	NA
Non-US NATO ^e	70/1	91/31	48/27	13/203	NA

^a NATO air defense forces are part of ground and/or air forces; there are no separate air defense services.

^b US divisions listed here as reserve are active units stationed in the United States but have duplicate equipment sets in European POMCUS sites.

^c Two of these brigades are European-based elements of active CONUS-based divisions cited above as reserve divisions.

^d The regiment listed here as reserve is an active unit stationed in the United States with a duplicate equipment set in European POMCUS site.

^e Non-US NATO reserve units are those manned only at cadre levels in peacetime. Definitions of reserve units vary from country to country, with peacetime manning levels ranging from 15 to 50 percent of wartime authorized manning. Reserve units are usually fully equipped but this equipment is generally older and less extensive than equipment in active units.

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Table 2
Warsaw Pact
Atlantic to Urals
Force Structure Summary

	Ground Force Divisions (Active/Reserve) ^a	Ground Force Independent Brigades (Active/Reserve) ^a	Ground Force Independent Regiments (Active/Reserve) ^a	Air Force Regiment/ Squadron	Air Defense Regiment/Squadron
Total	213/18	136/7	77/2	206/7	80/0
Soviet	159/3	95/5	42/0	162/3	53/0
NSWP	54/15	41/2	35/2	44/4	27/0

^a Active units are those units with a peacetime manning level of between 5 and 100 percent of wartime authorized strength. Reserve units, which the Soviets refer to as mobilization units, are those with peacetime manning levels below 5 percent.

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Table 3
NATO
Atlantic to Urals
Ground Forces Equipment in Units ^a

	Medium and Heavy Tanks	APC/IFV	Other Armored Vehicles	Field Artillery	Mortars	MRLs	SRBMs	Antitank Guns	ATGMs	Attack Helicopters
Total	18,640	23,790	10,650	9,850	6,500	440	195	190	11,190	780
United States	3,200	5,220	1,890	1,110	580	250	36	0	2,000	240
Non-US NATO	15,440	18,570	8,760	8,740	5,920	190	159	190	9,190	540

^a Figures for ground forces equipment are rounded to the nearest 10, except for helicopters, which are rounded to the nearest 5, and SRBMs, which are not rounded.

Table 4
NATO
Atlantic to Urals
Combat Aircraft in Units ^a

	Fighter/Interceptor	Ground Attack	Medium Bombers	Reconnaissance/ECM	Combat Capable Trainers
Total	1,025	2,005	25	375	1,035
US	115	525	0	45	0
Non-US NATO	910	1,480	25	330	1,035

^a Figures for combat aircraft are rounded to the nearest 5.

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Table 5
Warsaw Pact
Atlantic to Urals
Ground Forces Equipment in Units ^a

	Medium and Heavy Tanks	APC/IFV	Other Armored Vehicles	Field Artillery	Mortars	MRLs	SRBMs	Antitank Guns	ATGMs	Attack Helicopters
Total	48,200	54,240	32,760	26,840	8,360	5,680	1,495	6,430	7,310	1,175
Soviet	35,590	36,900	23,930	20,200	6,710	4,150	1,120	4,250	5,710	925
NSWP	12,610	17,340	8,830	6,640	1,650	1,530	375	2,180	1,600	250

^a Figures for ground forces equipment are rounded to the nearest 10, except for helicopters, which are rounded to the nearest 5, and SRBMs, which are not rounded.

Table 6
Warsaw Pact
Atlantic to Urals
Combat Aircraft in Units ^a

	Fighter/Interceptor	Ground Attack	Medium Bombers	Reconnaissance/ECM	Combat Capable Trainers
Total	4,330	2,590	400	700	3,900
Soviet	2,890	1,890	400	550	2,925
NSWP	1,440	700	0	150	975

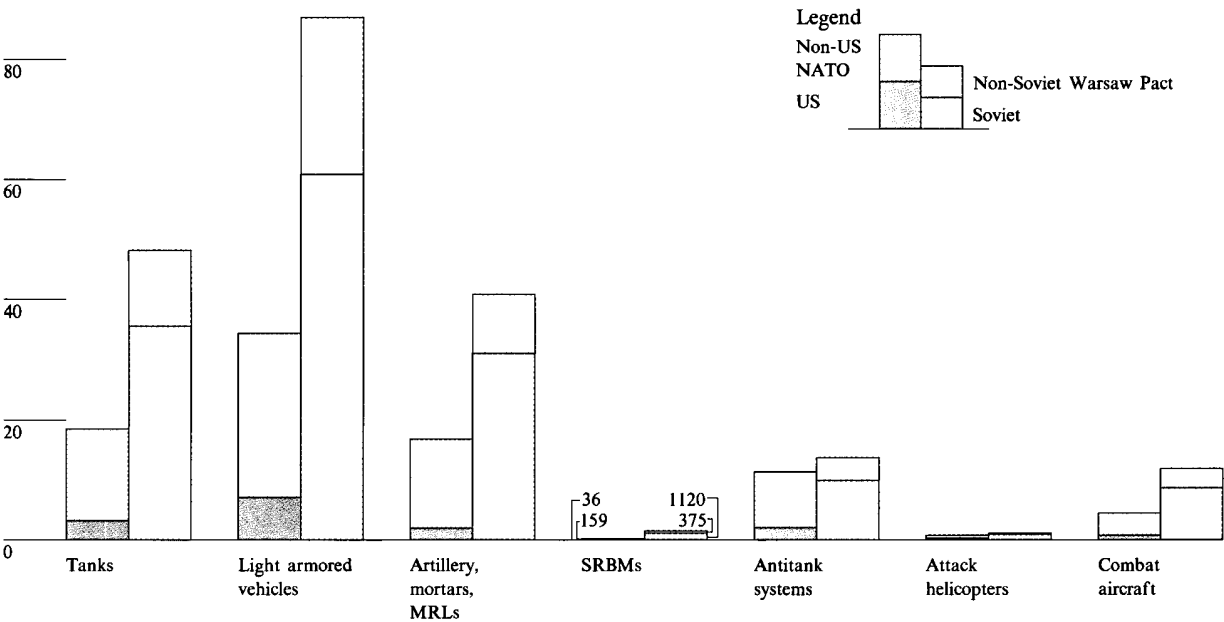
^a Figures for combat aircraft are rounded to the nearest 5.

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Figure 3
Atlantic-to Urals Zone
Equipment Summary

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Table 7
NATO
Atlantic to Urals
Manpower Summary

	Ground Forces	Air Forces	Air Defense Forces ^a	Total
Total	2,362,000	647,000	NA	3,009,000
US	217,000	91,000	NA	308,000
Non-US NATO	2,145,000	556,000	NA	2,701,000

^a NATO air defense forces are part of ground and/or air forces; there are no separate air defense services.

Table 8
Warsaw Pact
Atlantic to Urals
Manpower Summary

	Ground Forces	Air Forces	Air Defense Forces	Total
Total	2,164,000	358,000	491,000	3,013,000 ^a
Soviet	1,309,000	251,000	360,000	1,920,000
NSWP	855,000	107,000	131,000	1,093,000

^a In addition to manpower assigned to units, both NATO and the Warsaw Pact maintain uniformed military personnel assigned to ministries of defense and to national-level schools. Data in these two categories are included in the national manpower totals for NATO and NSWP forces (see tables 7 and 8). Comparable data for Soviet forces are not included in the manpower totals in table 8, however, because we lack sufficient information on which to base a valid estimate. Despite the great uncertainty associated with estimates of Soviet manpower in these categories, we have calculated a rough figure of some 250,000 that should be taken into account when comparing NATO and Warsaw Pact manpower totals presented in this document.

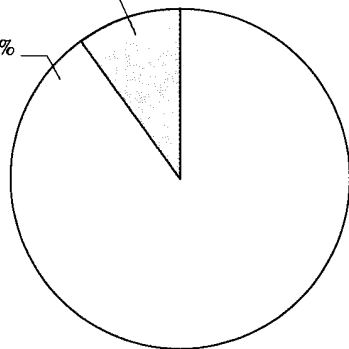
Figure 4
Atlantic-to-Urals Zone
Manpower Summary

Nato

Total 3,009,000

US 10 %

Non-US 90 %
NATO



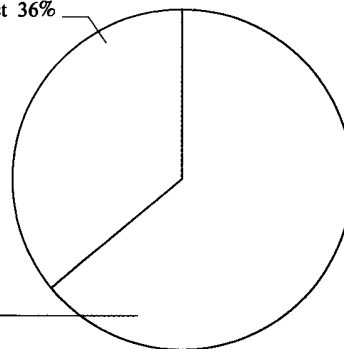
Warsaw Pact

Total 3,013,000

Non-Soviet

Warsaw Pact 36%

Soviet 64%



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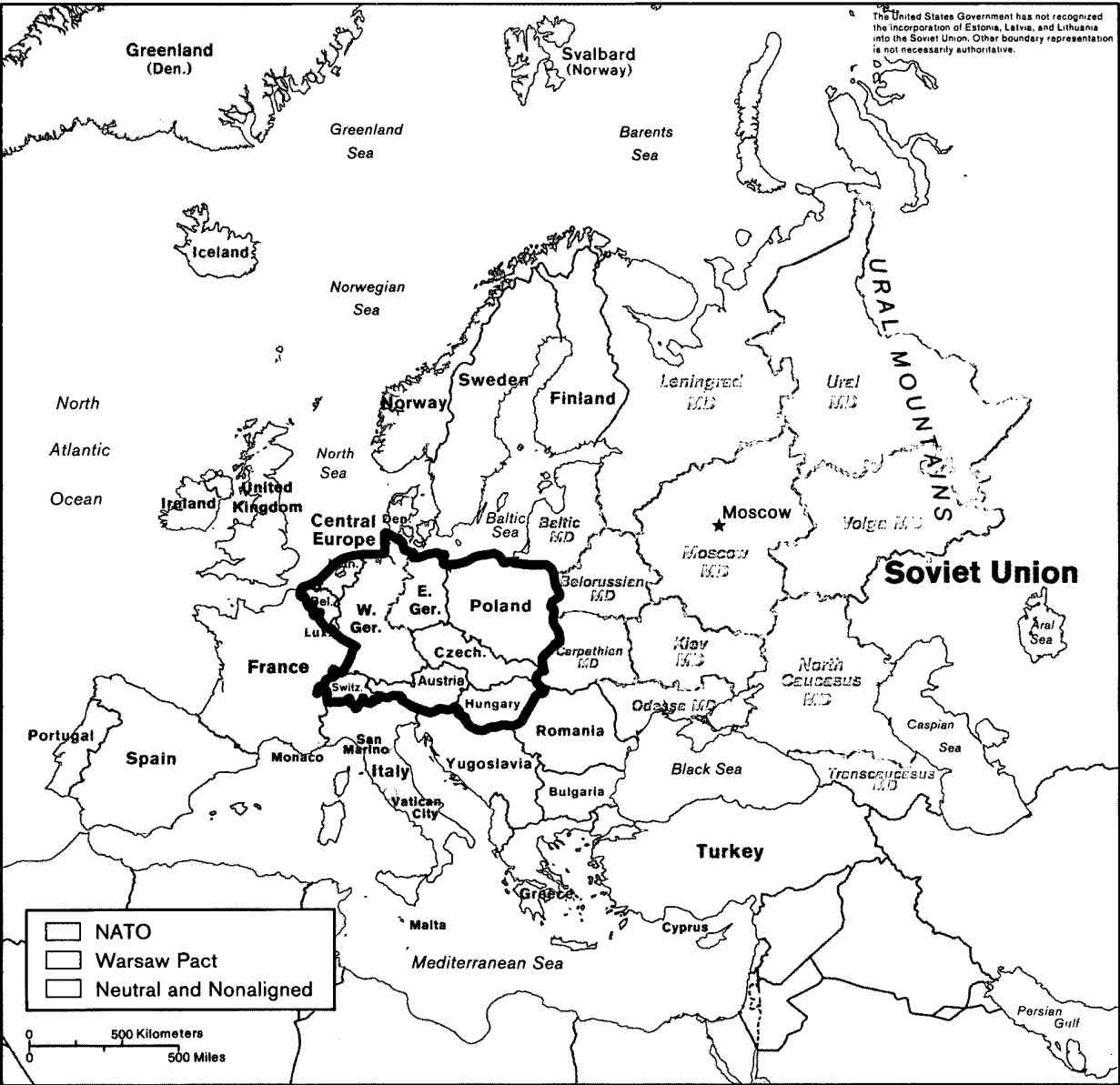
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Figure 4
NATO and Warsaw Pact Forces Within Central Europe



<u>Indigenous Forces</u>	<u>Stationed Forces</u>	<u>Indigenous Forces</u>	<u>Stationed Forces</u>
Belgium	Belgium	Czechoslovakia	Group of Soviet Forces, Germany
Netherlands	Canada	East Germany	Central Group of Forces (Czechoslovakia)
Luxembourg	France	Hungary	Northern Group of Forces (Poland)
West Germany	Netherlands	Poland	Southern Group of Forces (Hungary)
	United Kingdom		
	United States		

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Table 9
NATO
Central Europe
Force Structure Summary

	Ground Force Divisions (Active/Reserve)	Ground Force Independent Brigades (Active/Reserve)	Ground Force Independent Regiments (Active/Reserve)	Air Force Wing/Squadron	Air Defense ^a Wing/Squadron
Total	26/6	10/9	11/28	13/50	NA
US	4/5 ^b	3/0 ^c	2/1 ^d	0/13	NA
Non-US NATO ^e	22/1	7/9	9/27	13/37	NA

^a NATO air defense forces are part of ground and/or air forces; there are no separate air defense services.

^b US divisions listed here as reserve are active units stationed in the United States but have duplicate equipment sets in European POMCUS sites.

^c Two of these brigades are European-based elements of active CONUS-based divisions cited above as reserve divisions.

^d The regiment listed here as reserve is an active unit stationed in the United States with a duplicate set of equipment in a European POMCUS site.

^e Non-US NATO reserve units are those manned only at cadre levels in peacetime. Definitions of reserve units vary from country to country, with peacetime manning levels ranging from 15 to 50 percent of wartime authorized manning.

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Table 10
Warsaw Pact
Central Europe
Force Structure Summary

	Ground Force Divisions (Active/Reserve) ^a	Ground Force Independent Brigades (Active/Reserve) ^a	Ground Force Independent Regiments (Active/Reserve) ^a	Air Force Regiment/Squadron	Air Defense Regiment/Squadron
Total	67/11	43/2	34/1	67/4	20/0
Soviet	31/0	23/0	20/0	35/1	0
NSWP	36/11	20/2	14/1	32/3	20/0

^a Active units are those units with a peacetime manning level of between 5 and 100 percent of wartime authorized strength. Reserve units, which the Soviets refer to as mobilization units, are those with peacetime manning levels below 5 percent.

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Table 11
NATO
Central Europe
Ground Forces Equipment in Units ^a

	Medium and Heavy Tanks	APC/IFV	Other Armored Vehicles	Field Artillery	Mortars	MRLs	SRBMs	Antitank Guns	ATGMs	Attack Helicopters
Total	9,900	13,280	5,230	3,130	1,730	430	154	190	6,020	490
US	3,200	5,220	1,890	1,100	580	250	36	0	1,990	240
Non-US NATO	6,700	8,060	3,340	2,030	1,150	180	118	190	4,030	250

^a Figures for ground forces equipment are rounded to the nearest 10, except for helicopters, which are rounded to the nearest 5, and SRBMs, which are not rounded.

Table 12
NATO
Central Europe
Combat Aircraft in Units ^a

	Fighter/Interceptor	Ground Attack	Medium Bombers	Reconnaissance/ECM	Combat Capable Trainers
Total	225	765	0	130	175
US	100	205	0	20	0
Non-US NATO	125	560	0	110	175

^a Figures for combat aircraft are rounded to the nearest 5.

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Table 13
Warsaw Pact
Central Europe
Ground Forces Equipment in Units ^a

	Medium and Heavy Tanks	APC/IFV	Other Armored Vehicles	Field Artillery	Mortars	MRLs	SRBMs	Antitank Guns	ATGMs	Attack Helicopters
Total	20,510	24,330	12,990	9,200	2,490	1,780	589	1,750	2,830	710
Soviet	10,600	10,830	6,560	4,410	1,590	620	338	220	1,620	540
NSWP	9,910	13,500	6,430	4,790	900	1,160	251	1,530	1,210	170

^a Figures for ground forces equipment are rounded to the nearest 10, except for helicopters, which are rounded to the nearest 5, and SRBMs, which are not rounded.

Table 14
Warsaw Pact
Central Europe
Combat Aircraft in Units ^a

	Fighter/ Interceptor	Ground Attack	Medium Bombers	Reconnaissance/ ECM	Combat Capable Trainers
Total	1,675	1,070	0	305	890
Soviet	625	580	0	200	165
NSWP	1,050	490	0	105	725

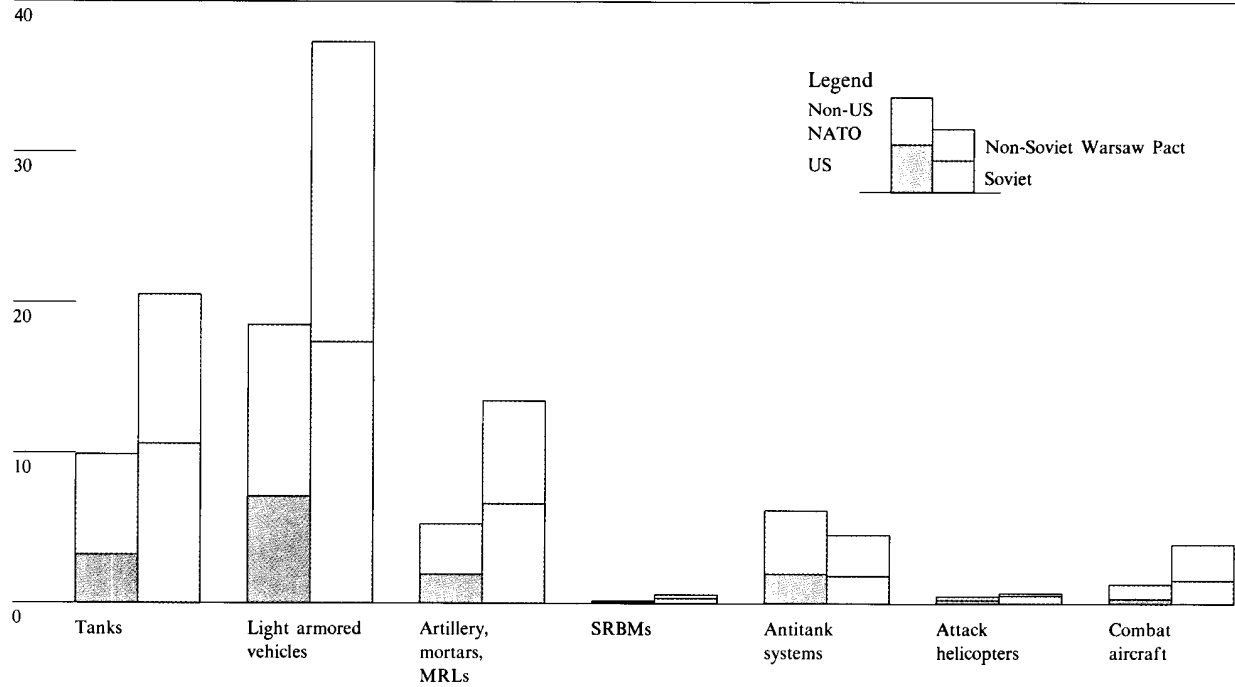
^a Figures for combat aircraft are rounded to the nearest 5.

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Figure 6
Central Europe
Equipment Summary

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Table 15
NATO
Central Europe
Manpower Summary

	Ground Forces	Air Forces	Air Defense Forces ^a	Total
Total	796,000	205,000	NA	1,001,000
US	210,000	44,000	NA	254,000
Non-US NATO	586,000	161,000	NA	747,000

^a NATO air defense forces are part of ground and/or air forces; there are no separate air defense services.

Table 16
Warsaw Pact
Central Europe
Manpower Summary

	Ground Forces	Air Forces	Air Defense Forces	Total
Total	1,118,000	129,000	124,000	1,371,000
Soviet	536,000	58,000	0	594,000
NSWP	582,000	71,000	124,000	777,000

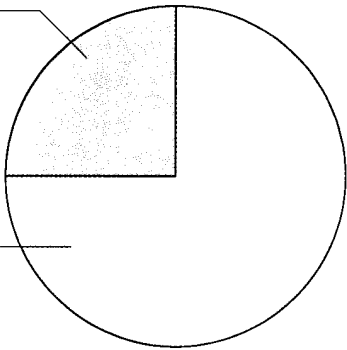
Figure 7
Central Europe
Manpower Summary

Nato

Total 1,001,000

US 25%

Non-US
NATO 75%

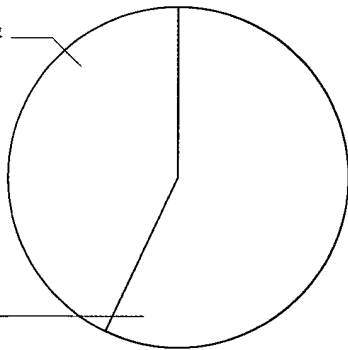


Warsaw Pact

Total 1,371,000

Non-Soviet
Warsaw Pact
57%

Soviet 43%



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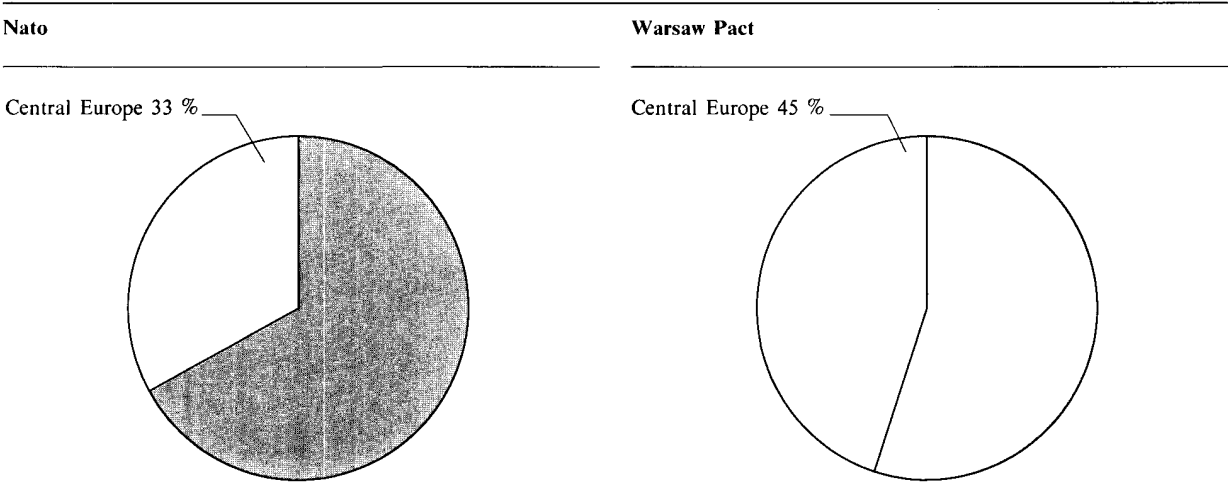
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Figure 8
Manpower in the Atlantic-to-Urals Zone
Forces in Central Europe



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Backup Tables

Force Structure

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Force Structure

Definition

This category lists only selected independent combat divisions, brigades, and regiments. It is not intended to capture all of the various type and size units of ground, air, and air defense (fixed wing only) forces. The types of independent combat units included are as follows:

- **NATO**

- *Ground Forces*. Infantry, armored, mechanized, airborne, air mobile, artillery, and short-range ballistic missile.
- *Air Forces*. Wings and squadrons of fixed-wing combat aircraft.

- **Pact**

- *Ground Forces*. Motorized rifle (mechanized), tank (armored), airborne, air mobile, air assault, artillery, multiple rocket launcher, antitank, short-range ballistic missile, and helicopter.
- *Air Forces*. Regiments and squadrons of fixed-wing combat aircraft.
- *Air Defense Forces*. Regiments of fixed-wing combat aircraft.

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NATO

Force Structure

Air Defense

There are no air defense units in the force structure of NATO countries.

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Equipment

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Armored Vehicles

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Medium and Heavy Tanks

Definition

All heavily armored all-tracked vehicles weighing at least 26 metric tons with a high velocity, direct fire main gun of at least 90 mm in caliber that can be elevated and depressed and is mounted in a turret that rotates at least 350 degrees. The tank models include the following:

- ***NATO***

- M-47, Centurion, AMX-30, M-48, Leopard I, M-60, Chief-tain, Leopard II, M-1, and Challenger.

- ***PACT***

- T-10, T-54/55, TR-800 (Romanian), T-62, T-64/64A, T-72, T-64B, and T-80.

- ***Equipment in Units***

- Equipment in all ground forces units that maintain at least a cadre of active duty uniformed military personnel, or units that have their equipment organized in unit sets but are assigned only a small number of active duty military personnel (less than 5 percent of wartime authorized strength) in peacetime.

- ***Other Equipment***

- Equipment held in national storage depots or capital repair facilities, as well as extra equipment in training units and schools.

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Armored Personnel Carriers (APCs)

Definition

All light armored wheeled or tracked personnel carriers used primarily to carry combat troops that are armed with a cannon less than 20 mm in caliber or a machinegun permanently mounted on the armored vehicle. The models of armored personnel carriers include the following:

- **NATO**

- M-75, AMX VCI, M-56, M-113, VAB, Transportpanzer 1, M-59, Leonidas, AMX-10P, YP 408, Spartan, FV 432, Chaimite, Grizzly, OTO 6614, Saxon, Saracen, BMR 600, and VCC-1/2.

- **Pact**

- BTR-152, BTR-40, BTR-50/OT-62, D-944, OT-810, BTR-60/OT-64/TAB-72, BTR-70/TAB-77, GT-S/GT-T/MTLB, and BMD (M1979/1).

- **Equipment in Units**

- Equipment in all ground forces units that maintain at least a cadre of active duty uniformed military personnel, or units that have their equipment organized in unit sets but are assigned only a small number of active duty military personnel (less than 5 percent of wartime authorized strength) in peacetime.

- **Other Equipment**

- Equipment held in national storage depots or capital repair facilities, as well as extra equipment in training units and schools.

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Infantry Fighting Vehicles (IFVs)

Definition

All light armored wheeled or tracked infantry fighting vehicles that are armed with a cannon of at least 20 mm in caliber and have troop firing ports incorporated into the basic design of the vehicle, and often equipped with the capability to fire an antitank guided missile from a launcher. The models of infantry fighting vehicles include the following:

- ***NATO***

- M-2 Bradley, Marder, and YPR-765 (aka M-113 AIFV).

- ***Pact***

- BMD-1, BMP-1/BMP-1A, BMP-2, and Bulgarian IFV (1984/1).

- ***Equipment in Units***

- Equipment in all ground forces units that maintain at least a cadre of active duty uniformed military personnel, or units that have their equipment organized in unit sets but are assigned only a small number of active duty military personnel (less than 5 percent of wartime authorized strength) in peacetime.

- ***Other Equipment***

- Equipment held in national storage depots or capital repair facilities, as well as extra equipment in training units and schools.

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Warsaw Pact

**Equipment Not in Units
Infantry Fighting Vehicles**

Warsaw Pact infantry fighting vehicles that are not in units are
addressed in the statement on light armored vehicles

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Other Armored Vehicles

Definition

In addition to APCs and IFVs, NATO and the Warsaw Pact have a large variety of other armored vehicles. This category does not incorporate all these other armored vehicles. It does include tanks that do not meet the weight and main gun caliber conditions set down for the medium and heavy tank category, as well as light armored vehicles that are not troop carriers but designed to support combat maneuver units on the battlefield—such as armored command, armored command reconnaissance, and armored reconnaissance vehicles. Not included in this category are armored vehicles that are primarily dedicated to pulling towed artillery or to transporting ammunition or other material. The models of other armored vehicles included in this category are as follows:

- **NATO**

- *Other Tanks.* AMX-13, M-41, M-24, and NM-116.
- *Armored Command/Armored Command Reconnaissance.* M-577, Sultan, command variants of other APCs, and armored combat support vehicles, such as armored vehicles mounting counter battery radar.
- *Armored Reconnaissance.* AMX-10RC, Scorpion, Scimitar, Ferret, Fox, Saladin, Cougar, Luchs, Lynx (M-113 C&R), Panhard EBR (60, 90), Panhard ERC 90, Panhard AML (60, 90), OTO 6616, M-4, M3A1 (armored car), and M3 Bradley.

- **Pact**

- *Other Tanks.* PT-76 and T-34.
- *Armored Command/Armored Command Reconnaissance.* BRDM/BRDM-2, BTR-152/BTR-40/BTR-50/BTR-60/BTR-70, GT-T/MTLB, BMD, BMP, ACRV M1974 and BMD/BTR, ACRV.
- *Armored Reconnaissance.* BRDM/BRDM-2/MTLB, OT-65, and BRM-1.

- **Equipment in Units**

- Equipment in all ground forces units that maintain at least a cadre of active duty uniformed military personnel, or units that have their equipment organized in unit sets but are assigned only a small number of active duty military personnel (less than 5 percent of wartime authorized strength) in peacetime. US equipment in POMCUS sites is included in this category.

- **Other Equipment**

- Equipment held in national storage depots or capital repair facilities, as well as extra equipment in training units and schools.

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Warsaw Pact

Equipment Not in Units
Other Armored Vehicles

Other armored vehicles in the Warsaw Pact that are not in units
are addressed in the statement on light armored vehicles

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Field Artillery and Mortars

Definition of Field Artillery

All towed or self-propelled, crew-served tube artillery (including antitank guns fielded with artillery units in lieu of howitzers) with a caliber equal to or greater than 100-mm. The models of field artillery include the following:

- **NATO**

- *Towed.* M-101/M-2, M-115, M-114, M-198, BF-50, FH-70, M-56, Mk-3, M18/40, 4.5/5.4 inches, D74, KS-35, Skoda 150 mm, 155 Schneider, and L-5 light gun.

- *Self-propelled.* M-109, M-55, M-108, M-44, M-107, M-110, M-52, AUF-GCT, Abbot, AMX-105A, and F-3.

- **Pact**

- *Towed.* BS-3/M38, T-12/MT-12 (used as artillery), M-30/D-30, A-19/D-74, M-46/type 59 field gun, M-18/ML-20/M-10/D-1/D-20/M-76 and B-4.

- *Self-propelled.* 2S1, 2S3, M1978 Czech howitzer (Dana), 2S5, and 2S7.

Definition of Mortars

A mortar is a specialized form of artillery howitzer, designed to fire solely at high-angle (45 to 80 degrees) typically using graded charges of propellants to alter its trajectory. Included in this category are all towed, truck-transported, and self-propelled mortars with a caliber of at least 100 mm:

- **NATO**

- 4.2 inch and 120 mm.

- **Pact**

- 120-mm towed and truck-transported variants, 120-mm 2S9, 120-mm 2S12, 160-mm M160, 240-mm M240, and 240-mm 2S4.

Equipment in Units

Equipment in all ground forces units that maintain at least a cadre of active duty uniformed military personnel, or units that have their equipment organized in unit sets but are assigned only a small number of active duty military personnel (less than 5 percent of wartime authorized strength) in peacetime.

Other Equipment

Equipment held in national storage depots or capital repair facilities, as well as extra equipment in training units and schools.

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25X1
25X6**Warsaw Pact****Equipment Not in Units
Field Artillery and Mortars**

In addition to artillery in operational units, the Soviets maintain a large reserve of artillery pieces at central storage depots throughout the USSR. There are [] depots identified in the Atlantic-to-Urals region. Additional artillery pieces are found at numerous training facilities within the zone. []

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[] On the basis of available information, we judge that 10,000-15,000 artillery pieces are stored at these facilities. Most of the tubes identified are of World War II vintage and have been retired from active service. Non-Soviet Warsaw Pact forces also maintain central reserve equipment depots and training facilities, but they store relatively few artillery pieces at these locations. We judge that less than 1,000 artillery tubes are maintained by the East Europeans in these facilities.

A small number of larger caliber mortars are kept in long-term storage at central artillery reserve depots in the Soviet Union. Insufficient information exists on these depots to make a determination of the specific number of mortars in storage, but we doubt that it could be greater than 1,000 to 1,500 pieces given their limited fielding in Soviet forces.

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Multiple Rocket Launchers

Definition

- All multiple rocket launchers with a caliber of at least 100 mm. These launchers would be capable of ripple firing or firing in a single salvo eight or more rockets out to a range of 40 kilometers.
- **NATO**
 - MLRS, LARS, and Teruel.
- **Pact**
 - 122-mm MRL variants, 130-mm M51, 132-mm BM-13, 140-mm variants, 220-mm BM-27, and 240-mm BM-24.
- **Equipment in Units**
 - Equipment in all ground forces units that maintain at least a cadre of active duty uniformed military personnel, or units that have their equipment organized in unit sets but are assigned only a small number of active duty military personnel (less than 5 percent of wartime authorized strength) in peacetime.
- **Other Equipment**
 - Equipment held in national storage depots or capital repair facilities, as well as extra equipment in training units and schools.

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Warsaw Pact

**Equipment Not in Units
Multiple Rocket Launchers**

Some multiple rocket launchers (MRLs) are believed to be stored at central artillery reserve depots in the Soviet Union. Although insufficient information is available to make a determination of the number of MRLs housed at these locations, we judge that it would be no more than 1,000 pieces—probably a mix of BM-13, BM-14-16, and BM-14-17 launchers.

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SRBMs

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Short-Range Ballistic Missile Launchers

Definition

All launchers firing individually surface-to-surface rockets or missiles that are either free flight or inertially guided with a maximum operational range equal to or less than 1,000 kilometers. The models of SRBM launchers include the following:

- ***NATO***
 - Lance, Pershing 1, Pluton, and Honest John.
- ***Pact***
 - FROG-3, FROG-7, SS-21, SS-1c SCUD, SS-23, and SS-12.
- ***Equipment in Units***
 - Equipment in all ground forces units that maintain at least a cadre of active duty uniformed military personnel, or units that have their equipment organized in unit sets but are assigned only a small number of active duty military personnel (less than 5 percent of wartime authorized strength) in peacetime.
- ***Other Equipment***
 - Equipment held in national storage depots or capital repair facilities, as well as extra equipment in training units and schools.

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Warsaw Pact

**Equipment Not in Units
Short-Range Ballistic Missile Launchers**

Some SCUD and FROG units possess excess storage capacity at their garrisons, but we are uncertain if this is used to store reserve equipment. There is no evidence to indicate that the non-Soviet Warsaw Pact nations maintain reserve short-range ballistic missile equipment at central storage depots.

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Antitank Systems

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Antitank Guns

Definition

All towed or self-propelled, crew-served, direct-fire guns with a caliber of at least 85 mm and fielded primarily in an antitank role. This category does not include recoilless rifles. The models of antitank guns include the following:

- ***NATO***
 - Jagdpanzer Kanone.
- ***Pact***
 - D-44/SD-44/D-48, BS-3, M53, and RT-12/T-12/MT-12.
- ***Equipment in Units***
 - Equipment in all ground forces units that maintain at least a cadre of active duty uniformed military personnel, or units that have their equipment organized in unit sets but are assigned only a small number of active duty military personnel (less than 5 percent of wartime authorized strength) in peacetime.
- ***Other Equipment***
 - Equipment held in national storage depots or capital repair facilities, as well as extra equipment in training units and schools.

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Warsaw Pact

**Equipment Not in Units
Antitank Systems**

We believe the Soviets have placed some antitank guns and antitank guided missiles—probably of World War II and 1950s vintage—in reserve storage at central depots throughout the Soviet Union. The information available, however, is insufficient to make a determination regarding the number of such systems stored at these locations.

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Antitank Guided Missile Systems (Vehicle)

Definition

All vehicular mounted (either armored or unarmored) crew-served antitank guided missile launchers. This category does not include ATGM-capable APCs or IFVs (which are counted as armored troop carriers), nor does it include light antitank missile weapons that are unguided, such as the US-produced LAW. The models of ATGM vehicles include the following:

- **NATO**

- Jaguar 1/2, AMX-13 (SS-11/Milan), Striker, M-901, M-113 (ITV), and includes systems mounted on other APCs if they are used exclusively in an antitank role.

- **Pact**

- AT-1 GAZ-66, AT-2 BRDM, AT-3 BRDM, AT-4 LUAZ, and AT-5 BRDM.

- **Equipment in Units**

- Equipment in all ground forces units that maintain at least a cadre of active duty uniformed military personnel, or units that have their equipment organized in unit sets but are assigned only a small number of active duty military personnel (less than 5 percent of wartime authorized strength) in peacetime.

- **Other Equipment**

- Equipment held in national storage depots or capital repair facilities, as well as extra equipment in training units and schools.

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Warsaw Pact

**Equipment Not in Units
Antitank Guided Missile Systems (Vehicle)**

Warsaw Pact ATGMs that are not in units are addressed in the
statement on antitank systems



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Antitank Guided Missile Systems (Manpack)

Definition

All man portable or truck-transported crew-served antitank guided missile systems. The category does not include light antitank missile weapons that are unguided. The models of manpack ATGM systems include the following:

- ***NATO***
 - SS-11, Milan, HOT, Dragon, TOW, and Cobra.
- ***Pact***
 - AT-3, AT-4, and AT-7.
- ***Equipment in Units***
 - Equipment in all ground forces units that maintain at least a cadre of active duty uniformed military personnel, or units that have their equipment organized in unit sets but are assigned only a small number of active duty military personnel (less than 5 percent of wartime authorized strength) in peacetime.
- ***Other Equipment***
 - Equipment held in national storage depots or capital repair facilities, as well as extra equipment in training units and schools.

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Warsaw Pact

Equipment Not in Units Antitank Guided Missile Systems (Manpack)

Information concerning stored ATGM (manpack) is almost nonexistent. Although it is probable that such stocks exist, possibly in large numbers, no figures are provided.



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Attack Helicopters

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Attack Helicopters

Definition

All army aviation rotary wing aircraft whose primary role is to provide fire support to ground maneuver units through the use of antitank guided missiles and mixes of rockets, machineguns, or cannons. This category does not include helicopters normally dedicated to the transportation of troops or other general utility functions that could be armed with some of these weapons. The attack helicopter models include the following:

- ***NATO***

- AH-1, PAH-1 (BO-105), Lynx, Alouette II, and Gazelle.

- ***Pact***

- Mi-8 HIP E, Mi-24 HIND D/E/F, and Alouette III.

- ***Equipment in Units***

- Equipment in all ground forces units that maintain at least a cadre of active duty uniformed military personnel, or units that have their equipment organized in unit sets but are assigned only a small number of active duty military personnel (less than 5 percent of wartime authorized strength) in peacetime.

- ***Other Equipment***

- Equipment held in national storage depots or capital repair facilities, as well as extra equipment in training units and schools.

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Warsaw Pact

Equipment Not in Units

Attack Helicopters

The US Intelligence Community has not identified any Soviet or non-Soviet Warsaw Pact attack helicopters held outside units.

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Combat Aircraft

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Combat Aircraft

Definition of Fighter/Interceptor

All fighter aircraft assigned a primary role of homeland defense (national air defense) or counter air. The fighter/interceptor aircraft include the following:

- **NATO**

- F-16 (multirole), F/A-18 (multirole), F-15 (multirole), Mirage F-1, Mirage III (multirole), F-5 (multirole), F-104 (multirole), F-100, Mirage 2000, F-4 (multirole), Lightning, and Draken.

- **Pact**

- MIG-15 Fagot, MIG-21 Fishbed C/E, MIG-21 Fishbed D/F, MIG-23 Flogger B/G/K, MIG-17 Fresco A/E, MIG-21 Fishbed J/K/L/N, SU-27 Flanker B, MIG-21 Fishbed JX, MIG-29 Fulcrum A, YAK-28 Firebar A/B, TU-128 Fiddler B, SU-15 Flagon A/D, SU-15 Flagon E/F, MIG-25 Foxbat A/E, and MIG-31 Foxhound A.

Definition of Ground Attack Aircraft

All fighter aircraft with a primary ground attack mission, including all F-111, F-4 Wild Weasel, Tornado, Mirage IV A/P, Buccaneer, and Fencer aircraft (except the Recce/ECM Fencers). The ground attack aircraft include the following:

- **NATO**

- F-16 (multirole), F/A-18 (multirole), Mirage 5, F-5 (multirole), F-35 Draken, Jaguar, Harrier, Buccaneer, F-104 (multirole), Mirage III (multirole), A-10, F-4 (multirole), Tornado, A-7, G-91, F-111, and Alpha Jet.

- **Pact**

- IL-28 Beagle, YAK-28 Brewer B/C, SU-24 Fencer A/B/C/D, SU-25 Frogfoot A, Su-7 Fitter A, SU-17/SU-22 Fitter B/C/D/H/J/K, MIG-27 Flogger D/J/J2, IAR-93 (Romanian), MIG-23 Flogger F/H, and MIG-17 Fresco A/C.

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25X1
25X6**Definition of Medium Bombers**

All bombers with an unrefueled operating radius of greater than 1,000 km but less than 5,000 km. The medium bombers include the following:

- **NATO**
 - Mirage IV.
- **Pact**
 - TU-16 Badger A/G, Tu-22M Backfire B/C, and TU-22 Blinder A/B.

Definition of Reconnaissance/ECM Aircraft

All aircraft with a reconnaissance mission. This category includes all tactical reconnaissance and strategic reconnaissance aircraft. This category excludes helicopters, fixed wing transport aircraft with Recce/ECM capabilities or missions and SIGINT/ELINT collection platforms. The aircraft included in this category are as follows:

- **NATO**
 - Mirage 5-BR, SAAB-MRI 17, Mirage F-1CR, Mirage III-RD, RF-4C/E, RF-84F, Canberra, EF-111, TR-1, RF-5, Jaguar, RF-104, and F-16.
- **Pact**
 - YAK-28 Brewer D/E, IL-28 Beagle, TU-16 Badger H/J/K, TU-16 Badger E, TU-16 Badger F, TU-22 Blinder C, SU-17 Fitter H/K, MIG-21 Fishbed H, MIG-25 Foxbat B/D/F, and SU-24 Fencer E.

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25X6**Definition of Combat Capable Trainers**

All training and combat aircraft used in training roles, including those assigned to combat units, operational conversion units, weapons conversion units, and training units that have an assigned wartime combat mission. The combat capable trainers include the following:

- ***NATO***

- Alpha Jet, Hawk, CM-170 Magister, MB 326, MB 339, F-104, F-5, Tornado, Lightning, F-4, Jaguar, Buccaneer, Harrier, F-16, G-91, Mirage F-1, Mirage III, A-7, T-2E, T-33, T-41, Mirage 2000, F-18, Draken, Mirage 5, and F-100.

- ***Pact***

- IL-28 Mascot, TU-22 Blinder D, SU-17 Fitter EG, L-39 Albatros, TS-11 Iskra, SU-15 Flagon C/G, MIG-23 Flogger C, MIG-25 Foxbat C, MIG-15 Midget, MIG-21 Mongol AB, SU-7 Moujik, and SU-27 Flanker C. Also includes any fighter, ground attack, or reconnaissance/ECM aircraft assigned to training units.

Equipment in Units

Equipment in all air and air defence forces units that maintain active duty uniformed military personnel.

Other Equipment

Equipment held in national storage depots or capital repair facilities, as well as extra equipment used by training units and schools.

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Manpower

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Manpower

Definition

All active duty uniformed military personnel assigned in peacetime to NATO member ground and air forces, and to Warsaw Pact ground, air, and air defense forces within the Atlantic-to-Urals zone.

- Included in the air defense subcategory are personnel associated with air defense headquarters, strategic missile units, antiballistic missile units, antisatellite units, radar units, and fixed wing units.

This definition has been crafted in accordance with the mandate of the NATO High-Level Task Force to focus on Warsaw Pact capabilities most relevant to a surprise attack and/or large-scale offensive action. The definition is uniformly applied to NATO forces as well as Pact forces. As a result, the data base excludes the following personnel: border guards, internal security troops, police, national-level construction and transportation troops, civil defense troops, short-leave military personnel (NATO), reservists, and civilians working in military establishments. In addition, the Pact forces in these categories are not currently subject to any reliable US (or NATO) estimate, and we would not expect to be able to monitor them with confidence in supporting verification of a reduction or limitation agreement.

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